HEALTH ADVISORY Update (2): West Nile Virus

Dallas County Health and Human Services (DCHHS) is reporting the first human case of West Nile Virus (WNV) infection confirmed in Dallas County for this season. This resident of zip code 75217 was diagnosed with West Nile Fever (WNF). Although West Nile activity in mosquitoes has been gradually increasing over the past 4 weeks, the vector index is currently relatively low in comparison to previous years. DCHHS is monitoring these trends closely and will issue additional health advisories as needed. Human WNV cases historically begin increasing locally following significant increases in the weekly vector index.

DCHHS is reminding medical providers to continue to be alert for cases of WNV disease, and to send WNV antibody (IgM and IgG) testing in patients with clinically compatible symptoms. Although the majority of WNV infections may be asymptomatic or cause mild febrile illness in humans, some individuals can develop severe illness. Clinicians should maintain a high index of suspicion for West Nile Neuroinvasive disease (WNND), which occurs in <1% of infections, typically characterized by: fever with aseptic meningitis, encephalitis, acute flaccid paralysis, altered mental status, seizures, transverse myelitis, or cranial nerve palsies, with generalized muscle weakness.

Current testing recommendations for all patients with suspected WNF or WNND include sending WNV IgM and IgG antibodies from serum. In suspected WNND patients, the following tests should additionally be considered: (1) WNV IgM and IgG antibodies in CSF, (2) testing for IgM and IgG antibodies for other endemic arboviruses from CSF or serum, as feasible. Additional testing by PCR for WNV from CSF or serum should be considered in patients with immune suppression or very recent onset of symptoms (within 3 days of presentation).

Patients at higher risk of severe disease, including those over 50 years of age or with immune-suppression (e.g. organ transplantation, chemotherapy, dialysis, HIV infection), should be reminded to take particular preventive measures to avoid mosquito exposures, including wearing long sleeves and pants when outside and using EPA-registered repellants such as DEET.

Dallas County experienced its largest epidemic of West Nile illnesses in 2012, when 398 cases of WNV infection were recorded, including 20 deaths. Please report suspected WNV cases as soon as possible by fax to DCHHS at (214) 819-1933. For questions please contact DCHHS at (214) 819-2004. Information about WNV is available at: http://www.cdc.gov/westnile/index.html.